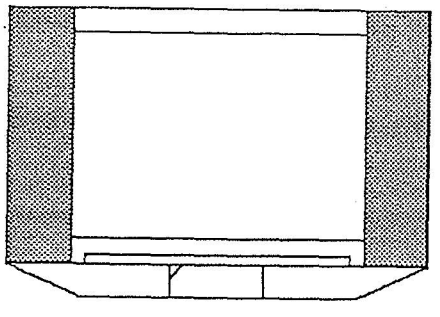
Farbfernseher
Color television



SERVICE ANWEISUNG

SERVICE MANUAL

TECHNISCHE DATEN

Chassis	-PC040 "Kalt" elektrisch vom Netz getrennt
Bildröhre	-25" - 28": Flat-Square
Netzspannung	-220V ± 10%, 50/60 Hz- 85W
Ton	-Analog & Nicam Stereo (oder Nicam vorbereitet)
Musik Leistung	-2x20 Watt Lautsprecher-2x4 Ohm
Hochspannung	-24,5 kV
Strahlstrom	-1 mA
Antennen-Eingang	-75 Ohm DIN 45325-2
Tuner	-Varicap
Abstimmung	-Elektronisch, Frequenz-Synthese mit On-Screen-Display
Programm-Vorwahl	-60 Programm-Speicher
Videotext	-TOP/FLOF Videotext
Externe Ein-Ausgänge	-Kopfhörer-Buchse (Jack) für Mono/Stereo-Ton -Ton-Video Eingang am Bedienteil (Cinch- Buchse) -2 Buchsen für externe Boxen -2 SCART-Buchse EN 50049
Empfangs-Norm	-C.C.I.R. PAL B/G

GENERAL FEATURES

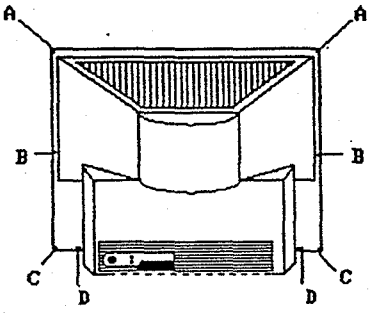
Chassis	-PC040 "cold electrically separated from mains
Picture tube	-25" - 28": Flat-Square
Power supply	-220V±10%, 50/60Hz, 85Watt
Audio system	-Analogical & Nicam stereo (or Nicam preset)
Music power	-2x20 Watt, loudspeakers 2x4 Ohm
EHT	-24.5 KV
Max beam current	-1 mA
Antenna input	-75 Ohm DIN 45325-2
Tuner	-Varicap type
Tuning system	-Electronic frequency synthesis and ON-Screen-Display
Program preselection	-60 storable programs
Teletext	-TOP/FLOF teletext
External in/output	-Headphone Jack for mono/stereo sound Audio/Video frontal input (Cinch socket) -Two Jack for external boxes -2 SCART EN50049.
Reception standard	-CCIR PAL B/G

ZUGANG ZU DEN BAUTEILEN.

Abnahme der Rückwand:
-Die Schrauben A, B und C entfernen.
-Die Schneide eines Schraubenziehers in die Ritze D stecken und nach oben drücken.
-An der Rückwand-Unterseite ziehen um sie zu entfernen.

ACCESS TO INTERNAL COMPONENTS

To remove the back panel:
-Unscrew screws: A , B and C.
-Introduce a blade type screwdriver into D slots and press upward.
-Pull the bottom part of the back panel and remove it.



ZUGANG ZUM CHASSIS

-Um das Chassis herauszunehmen die Zungen E nach der Aussenseite des Gehäuses drücken und gleichzeitig am Chassis ziehen.
-Um es wieder einzulegen, das Chassis in die vorgesehene Halterung stecken und drücken bis es in den Zungen E einrastet.

MAIN CHASSIS REMOVAL

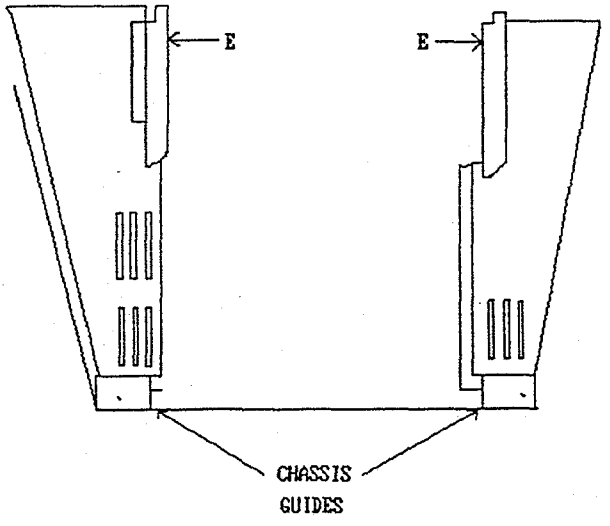
-To remove the chassis press the tags E towards the hand sides of the cabinet and at the same time pull out the chassis.
-To insert the chassis plug it into the appropriate guides and press it till will be locked by the tags E.

Senkrechtes Aufstellen des Chassis

Um einen leichten Zugang zu den Bauteilen und der Leiterbahn zu haben wird das Chassis seitlich auf die Kühlkörper aufgestellt.

Service positioning of the chasis

To enable easy access to the copper and components sides turn the chassis towards left or right hand side, when it's completely out. The chassis heatsink allows to the chassis itself to stand-up on its side.



SICHERHEITSVORSCHRIFTEN

-Den Teil des Chassis, welches unter Netzspannung steht, niemals berühren wenn das Netzteil nicht vom Netz getrennt ist.
-Niemals die Bildröhre Ein-Ausbauen oder handhaben ohne hierzu die erforderliche Schutzbrille zu tragen.
-Bevor ein repariertes Fernsehgerät dem Kunden zurückgegeben wird, muß eingehend geprüft werden daß dieses völlige Sicherheit gewährleistet gegen elektrischen Schlag. Ausserdem muß geprüft werden daß, die vom Hersteller eingebauten elektrischen Schutzschaltungen, während der Reparatur versehentlich beschädigt worden sind.
-Deshalb empfehlen wir die folgenden Prüfungen durchzuführen:
-**Isolierung.** Der Isolierungswiderstand darf nicht weniger als 2 MOhm bei 500V Gleichstrom zwischen den Netzstrompolen und irgendeinen berührbaren Metallteil betragen.
-**Hochspannung.** Die Hochspannung darf niemals höher als die an der Rückwand angegebenen sein. Höhere Hochspannung verursacht eine Beschädigung der Bildröhre oder der Hochspannungs-Schaltung.
Die Hochspannungs-Schaltung darf nicht verändert werden um zu vermeiden daß falsche Spannungswerte eine gefährliche Röntgenstrahlung erzeugen, die von den Amtlichen Bestimmungen zugelassenen Werte überschreitet.

SAFETY NOTE

-Do not accidentally touch that part of chassis power supply not electrically separated from mains.
-Do not install, remove, or handle the picture tube unless shatter-proof goggles are worn and install, remove or handle only after having kept away people not so equipped.
-Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the set by the manufacturer has become defective or inadvertently defected during servicing.
Therefore following checks are recommended:
-**Insulation.**
Resistance should not be less than 2M Ohm at 500 V DC between the mains poles and any accessibile metal parts.

-**High voltage.** High voltage should not be kept at higher values than those indicated on the receiver's back panel. Operating at higher voltage may cause failure of the picture tube or of high voltage supply.
Furthermore, in no case whatsoever, must the electrical circuit providing the EHT be altererd so as to prevent wrong voltage values from causing ionizating radiations above those allowed by International Standards.

WICHTIGE BAUTEILE

PC 040 -Chassis mit folgenden Schaltfunktionen:

a)ZF-Verstärker, Zeilen und Bild Oszillator, Synchronsignaltrennung (TDA 4504/B)

b)Bildablenkung (TDA 8170)

c)Zeilenablenkung (T301 - T302)

d)Schaltnetzteil (TDA 4601/D -401)

e)5 und 12,6V Umschaltung (TDA 8139)

f)Luminanz und Krominanz-Schaltung (TDA 3301/B)

g)Abstimmschaltung (TVPO ST92-10/ NVM 3060 - TBA 2800)

Am Chassis steckbare Leierplatten

FL2462/84	-Kabel Tuner (38,9 MHz Bild-ZF, 33,4 MHz Ton-ZF)
PC 118	- Top Videotextdekoder
BS 848	-Stereodekoder
BS 849	-RGB Schalter
PC 041	- 2 Scartplatine

Am Chassis verbundene Leiterplatten

BS 852	-Bildröhrenplatte mit Video-Endstufen
BS 847	-Infrarot Fernbedienung
PC 048	-Nicam Dekoder

MAIN COMPONENTS

PC 40 -Multifunctional chassis including following functional units:

a)IF amplifier, horizontal and vertical oscillator, syncro separator (TDA 4504/B)

b)Vertical deflection (TDA 8170)

c)Horizontal deflection (T301 - T302)

d)Power supply (TDA 4601/D - T401)

e)5 and 12,6V switching circuit (TDA8139)

f)Luminance and chrominance circuit (TDA 3301/B)

g)Tuning circuit (TVPO ST92-10/NVM 3060-TBA 2800)

PCBs plugged on chassis

FL2462/84	-CATV RF unit p.c.b. (38,9 Mhz video IF; 33,4 Mhz audio IF)
PC 118	-Top teletext decoder
BS 848	-Stereo decoder
BS 849	-RGB selector
PC 041	-Two-Scart module

PCBs off chassis

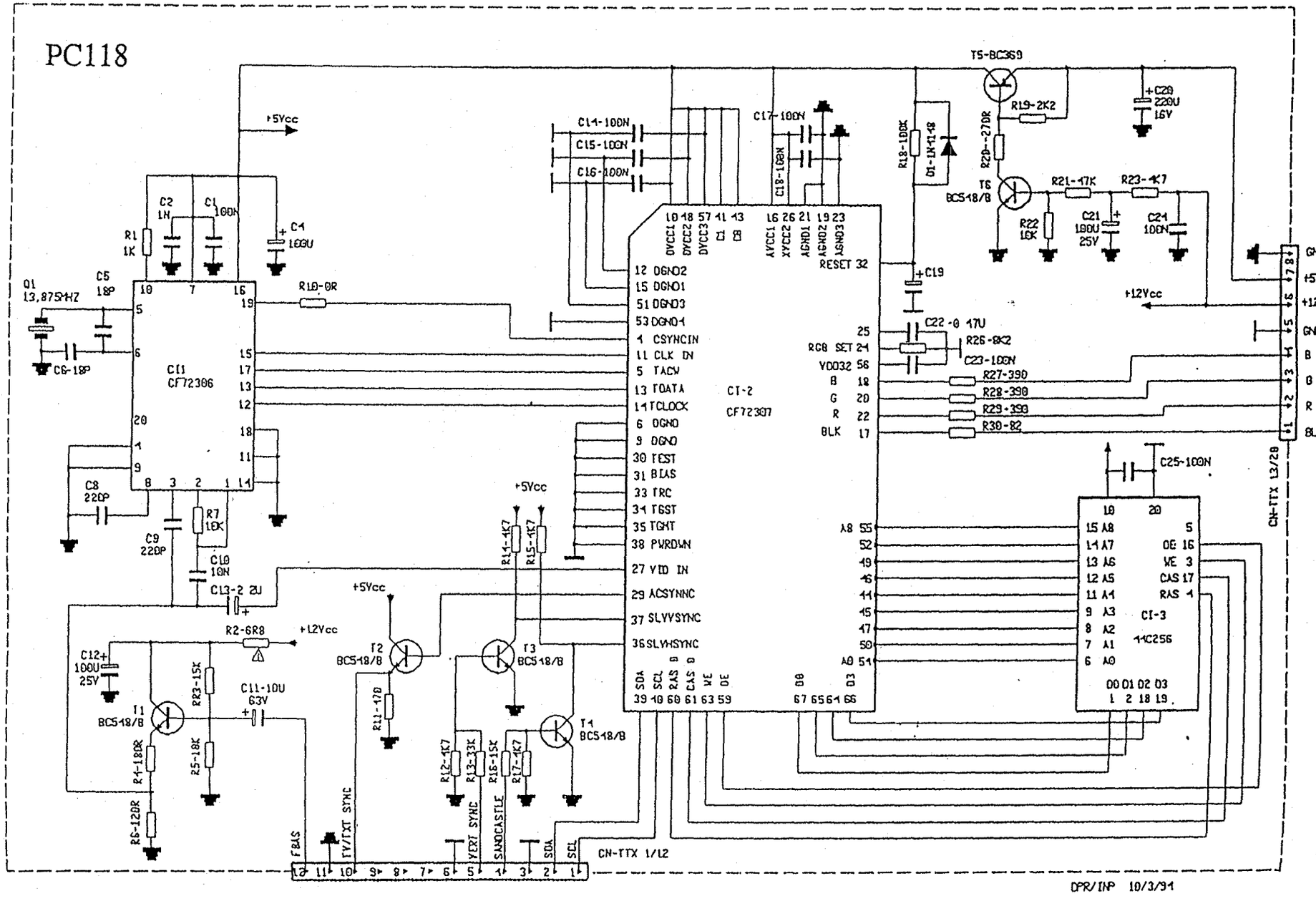
BS 852	-CRT p.c.b. with video output stages
BS 847	-Infrared remote control
PC 048	-Nicam decoder

Besug Ref.	Type		Funktion	Electronic Functions
CI 1	NVM 3060	PC 040	Nichtflüchtiger Speicher	Non volatile memory
CI 2	ST92-10	PC 040	µP für Abstimmung und OSD	Tuning Micro with OSD
CI 90	TBA 2800	PC 040	IR-Verstärker	IR amplifier
CI 101	HCF4066	PC 040	S-VHS Schalter	S-VHS switch
CI 102	TBA 3301	PC 040	PAL Dekoder	PAL decoder
CI 351	TDA 8145	PC 040	O/W Kissenentzerrung	E/W correction
CI 401	TDA 4601/D	PC 040	Oszillator und Steuerung Schaltnetzteil	Switch-mode oscillator and control
CI 402	TDA 8139	PC 040	Stabilisierung 5 und 12,6V	5V and 12.6V stabilizer
CI 501	TDA 4504/B	PC 040	ZF-Verstärker,Zeilen und Bild-Oszillator Stummschaltung, Video-Verstärker und Video-Schalter	IF amplifier, horizontal and vertical, AGC, muting, video amplifier and video switch.
CI 601	TDA 8170	PC 040	Bild-Endverstärker	Vertical output amplifier
CI 951	MC14053	PC 041	SCART Schalter	Scart switch
CI 952	TEA5114A	PC 041	RGB Schalter	RGB selector
CI 953	MC1458	PC 041	Audio Verstärker	Audio amplifier
CI 701	TEA5101A	BS 852	R-G-B Verstärker	RGB amplifier
CI 201	TDA 3857	BS 848	5,5 MHz und 5,74 MHz Ton-Demuodulator	5.5Mhz and 5.74Mhz audio demod.
CI 202	MC 44130	BS 848	Stereo Dekoder	Stereo decoder
CI 203	TDA 2009	BS 848	L&R Ton-Ausgangsverstärker	L & R audio output amplifiers
CI 204	TDA 2822M	BS 848	Ton-Verstärker für Kopfhörer	Audio amplifier for headphone
CI 1	CF72306	PC 118	Data slicer	Data slicer
CI 2	CF72307	PC 118	Videotext Prozessor	Teletext video processor
CI 3	44C256	PC 118	DQPS demodulator und Nicam	100 teletext pages memory
CI 1	CF70088	PC 048	demultiplexer	DQPS demodulator and Nicam demultiplexer
CI 2	TDA1543	PC 048	D/A Konverter	D/A converter
CI 3	LM833N	PC 048	J 17 deemphasis	J 17 deemphasis
CI 4	LM833N	PC 048	J 17 deemphasis	J 17 deemphasis
CI 5	MC14052BP	PC 048	Ton Schalter	Audio switch

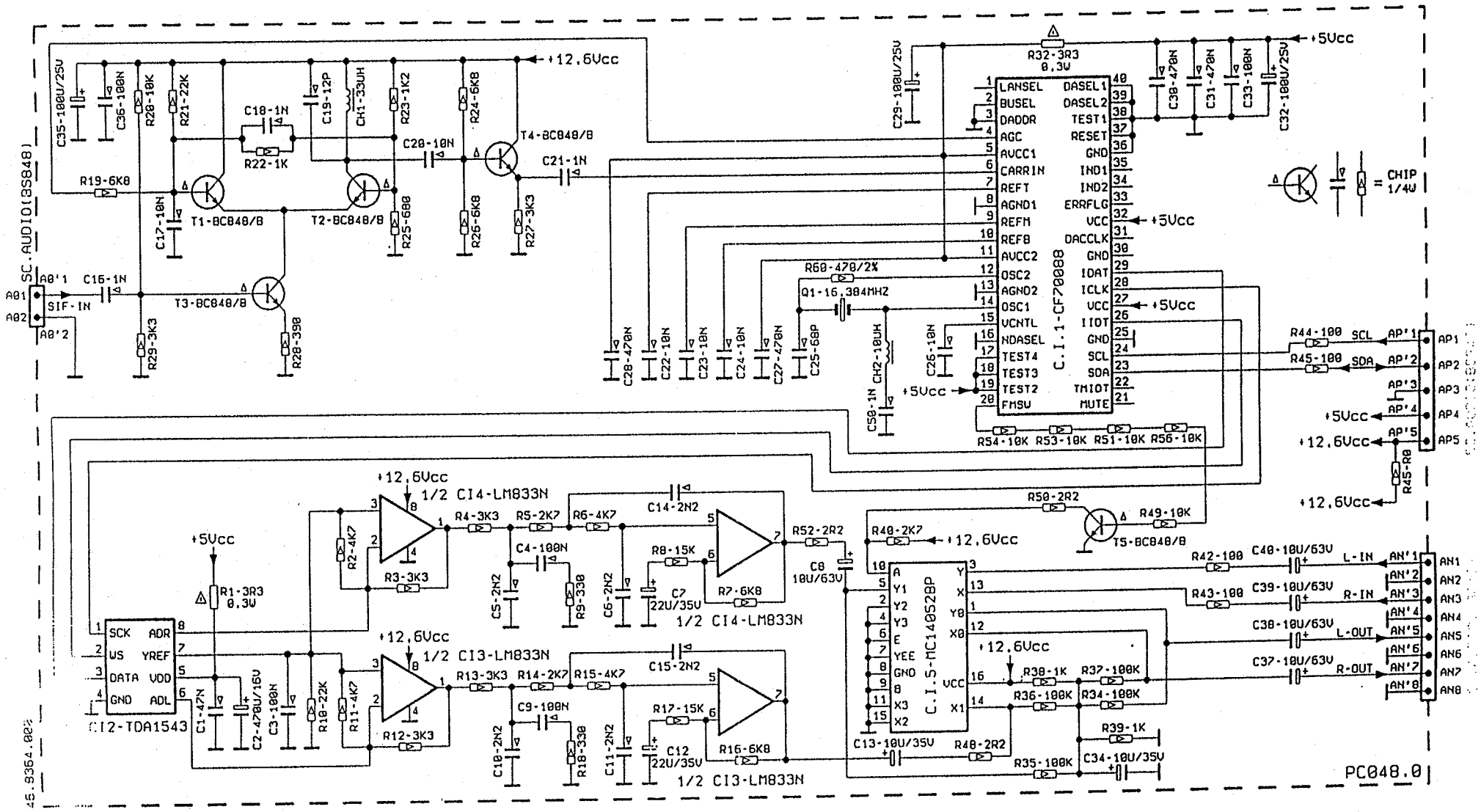
Verwendete Transistoren und ihre Funktion
Transistor used and relevant function

Bezug Ref.	Type	Leiterplatte P.c.b.	Funktion	Electronic functions
T 1	BC 548/B	PC 040	Schalter	On-off switching
T 2	BC 558/B	PC 040	Schalter	On-off switching
T 101	BC 548/B	PC 040	S-VHS Schalter	S-VHS switch
T 102	BC 558/B	PC 040	Strahlstrombegrenzer	Beam peak limiter
T 103	BC 548/B	PC 040	Strahlstrombegrenzer	Beam peak limiter
T 171	BC 548/B	PC 040	Ton-Verstärker für Cinch Buchse	Audio amplifier for Cinch socket
T 301	BD 675	PC 040	Zeilen-Treiber	Horizontal driver
T 302	BU 508/AF	PC 040	Zeilenausgans-treiber	Horizontal output amplifier
T 401	BU 508/AF	PC 040	Schaltnetzteil Transistor	Switch-mode transistor switch
T 402	BC 548/B	PC 040	Stand-by Schalter	Stand-by switch
T 501	BC 548/B	PC 040	Emitterfolger	Emitter follower
T 502	BC 548/B	PC 040	Emitterfolger	Emitter follower
T 503	BC 548/B	PC 040	Bild-Austast Impulsformer	Vertical blanking shaper
T 504	BC 558/B	PC 040	Bild-Austast Impulsformer	Vertical blanking shaper
T 601	BC 548/B	PC 040	Zeilen-Impuls Verstärker	Vertical shift
T 602	BC 548/B	PC 040	Bild-Impuls Verstärker	Vertical shift
T 951	BC 548/B	PC 041	Scart Schalter	Scart switch
T 952	BC 548/B	PC 041	Video-Verstärker	Video amplifier
T 953	BC 548/B	PC 041	Video Emitterfolger	Video emitter follower
T 954	BC 558/B	PC 041	Video Emitterfolger	Video emitter follower
T 955	BC 548/B	PC 041	Video Emitterfolger	Video emitter follower
T 201	BC 337/25	BS 848	Emitterfolger	Emitter follower
T 202	BC 558/B	BS 848	5,5 MHz Filter	5.5 MHz active filter
T 203	BC 548/B	BS 848	Mono/Stereo Schalter	Mono/Stereo switch
T 204	BC 558/B	BS 848	5,74 Filter	5.74 MHz active filter
T 205	BC 548/B	BS 848	Stummschaltung	Audio muting
T 206	BC 548/B	BS 848	Stummschaltung	Audio muting
T 701	BC 548/B	BS 852	Austast-Signal	Spot blanking
T 702	BF 393	BS 852	Austast-Signal	Spot blanking
T 651	BC 548/B	BS 843	Video Verstärker	Video amplifier
T 660	BC 548/B	BS 843	5V Schalter	5Vcc switch
T 170	BC 558/B	BS 858	Sandcastle Schalter	Sandcastle switch

TTX MULTIPAGE TOP/FLOF



SC. NICAM PC 048



ERSATZTEILLISTE
SPARE PARTS LIST

MODELS:

A	CT95S63TOP
B	CT95S63N
C.	CT95S71TOP
D	CT95S71N

Assy	*Et.-Nummer Code no.*	*Bezeichung / Description*	A	B	C	D
PC040	805067000	HAUPTCHASSIS / MAINS CHASSIS	•	•	•	•
PC041	804611000	2 SCARTPLATINE / TWO-SCART MODULE	•	•	•	•
PC118	804935000	VIDEOTEXT DEKODER / TELETEX DECODER	•	•	•	•
PC048	804649000	NICAM DEKODER / NICAM DECODER		•		•
BS848	804575200	STEREO DEKODER / STEREO / DECODER	•	•	•	•
	882243000	TUNER HY	•	•	•	•
UT2	804814000	FERNBEDIENUNG / REMOTE CONTROL	•	•	•	•
	712078000	BILDRÖHRE / PICTURE TUBE	•	•		
	712049000	BILDRÖHRE / PICTURE TUBE			•	•
	804967000	ENTMAGNETISIERUNGSSPULE / DEGAUSSING COIL	•	•		
	804968000	ENTMAGNETISIERUNGSSPULE / DEGAUSSING COIL			•	•
	732080000	8 OHM LAUTSPRECHER / LOUDSPEAKER	•	•	•	•
	692024100	NETZKABEL / MAINS CABLE	•	•	•	•
	752012000	BATTERIE 1,5V (2 STÜCK) / BATTERY (2 PIECES)	•	•	•	•
	468856000	BEDIENUNGSHANDBUCH / INSTRUCTION MANUAL	•	•	•	•

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHUNG	DESCRIPTION
		805067000 PC040 HAUPTCHASSIS / MAIN CHASSIS	
01	672095000	KEYBOARD	
02	692048000	EHT KABEL	EHT CABLE
03	792270000	IR-FERBEDIENUNG	INFRARED RECEIVER
04	682598100	BILD. SOCKEL	CRT SOCKET
C1-4 C'1-4 PC'1-4	682596000	STECKER 4 STIFTE	4-WAYS CONNECTOR
PS'1-8	840680000	STECKER 8 STIFTE	8-WAYS CONNECTOR
PS'9-20	840682000	STECKER 12 STIFTE	12-WAYS CONNECTOR
TTX1-12	682647000	STECKER 12 STIFTE	12-WAYS CONNECTOR
PO'1-2	682648000	STECKER 2 STIFTE	2-WAYS CONNECTOR
FI'1-3 RZ'1-3	682649000	STECKER 3 STIFTE	3-WAYS CONNECTOR
C-1	930072431	CFN'2N2 K 63V	
C-103- 129-130- 353-520 C-226- 258-259 C-2	930073251	CCN'1N0 K 50V 2B4	
C-11-410 C-237- 238 C-21	930071451	CEN'100UM 25V	
C-112- 313-426- 501-514 C-208- 229-230 C-964- 970	512174000	CEN'10U M 35V	
C-114	930073787	CCN'15P J 50V NP0	
C-115	930073167	CEN'4U7 M 63V	
C-116- 131-124- 174-310 C-966	930073161	CEN'1U0 M 100V	
C-117- 119-120- 121-125- 301-432- 433-517 C-602- 610 C-224- 225-234- 235-240- 242-244- 247-249 C-1-3- 14-15- 16-17- 18-23- 24-25 C-952- 953-954- 955-956- 957-961	532276000	CFN'100NK 63V	
C-122- 135-136- 503	930074042	CFN'47N K 63V	

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHNUNG	DESCRIPTION
C-123A C-236	512244000	CEN'470UM	16V
C-126-519 C231-233 C-959-960-967-968	930074048	CFN'220NK	63V
C-13	930073601	CEN'22U M	35V
C-13-81-110-302-415 C-243-246 C-4-12-21 C-951	930073747	CEN'100UM	25V
C-132 C-207	930070696	CCN'68P J	50V N150
C-133	522457000	CCN'82P J	50V N150
C-134 C-5-6	930073821	CCN'18P J	50V NP0
C-2-82-171-172-428	930074004	CCN'4N7 Z	50V 2F4
C-201-251	512115000	CEN'22U M	16V
C-203	930073163	CEN'2U2 M	63V
C-204	930073972	CEN'2U2 M	63V
C-213-215	532422000	CFN'2N2 J	63V
C-214-216	532386000	CFN'1N0 J	63V
C-218	532419000	CPN'3N9 J	63V
C-221-222	930073663	CEN'4U7 M	63V
C-227-228	930074050	CFN'330NK	63V
C-250	512169000	CRB 2200U	M 35V SUB.
C-3 C-239-241	512175000	CEN'220UM	16V
C-303	532425000	CFN'33N K	100V P5
C-304	512242000	CRA 22U M	350V
C-305	532385000	CPM 820NK	250VP225
C-306	532437000	CTS 9N5 J	2KV
C-306/A	532245000	CTS 1N5 J	1,5KV
C-307	532251000	CTS 33N J	1KV P225
C-308	532388000	CPM 390NJ	250V
C-309-413 C-19 C-965	930070828	CEN'1U0 M	100V
C-311	532156000	CPM 560NJ	250VP225
C-312	930073347	CMM 100NK	160V
C-314	930070694	CRB 470UM	50V 105Õ
C-351	930073631	CEN'47U M	35V
C-352 C-10	930072294	CFN'10N K	63V
C-354	532343000	CFN'100NJ	63V

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHUNG	DESCRIPTION
C-356-605	930072241	CFN'4N7 K 63V	
C-4-5-6-7-101-111-113	930074006	CCN'22N Z 50V 2F4	
C-401	930072229	CFS 470NM 250V CA	
C-402	930073653	CMM 47N K 630V P15	
C-404-405-406-407	930074038	CCN'1N0 M 1KV 2B4	
C-408	930072138	CCS 2N2 M 400/4KV	
C-409	930070830	CEN'100UM 35V	
C-411	532424000	CTS 2N2 J 1KV5 P15	
C-412	930073129	CCN'56P J 50V N150	
C-415/A	930073253	CCN'470PK 50V 2B4	
C-10-123-127-606			
C-217			
C-417	512248000	CEF 150UT 385V D25	
C-418	532376000	CPP 6N8 J 400V P10	
C-419	930070834	CRA 100UM 250V105Õ	
C-421	930072983	CRB 1000U M 25V	
C-245-248			
C-422	930073468	CEN'10U M 63V	
C-232			
C-958-962-963			
C-423	930074054	CFN'680NK 50V	
C-424	930070367	CRB 1000U M 16V	
C-425	512184000	CEN'47U M 25V	
C-427	930073745	CEN'100UM 35V	
C-429-430	522647000	CCN'270PM 1KV 2B4	
C-502-507-516-705	930072299	CFN'22N K 63V	
C-220			
C-504-506-512	930074052	CFN'470NK 63V	
C-22			
C-508-704	930070824	CEN'220UM 16V	
C-223-223/A			
C-20			
C-510-513	532274000	CFN'68N K 63V	
C-515	532427000	CPC 2N7 3,5% 63V	
C-518	532344000	CFN'4N7 J 63V	
C-601	930073427	CRB 1000U M 35V	
C-603	512036000	CRB 220UM 35V	
C-604	930070680	CFN'6N8 K 63V	
C-607	532426000	CMM 470NK 100V	
C-608	930073303	CRB 2200U M 25V	
C-609	512267000	CEN'3U3 M 63V	
C-611	930072963	CMM 220NK 100V	

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHNUNG	DESCRIPTION
C-701-702-703	930073127	CCN'33P J 50V NP0	
C-706	930073506	CMM 100NK 250V P10	
C-707-708-712	930074000	CCN'680PK 50V 2B4	
C-709	512250000	CEN'1U0 M 250V	
C-710	930073980	CMM 10N K 630V P10	
C-711	522625000	CAT 2N2 M 2KV	
C-83	930073165	CEN'22U M 35V	
C-9-128 C-202-211/A	930073160	CCN'10N Z 50V 2F4	
C-958/A	930074022	CCN'47N Z 50V 2F4	
C-971-972-973-974-975-976-977-978	522808000	CMI.4N7 M 16/X	
CH-1-103 CH-201	930071276	BNA-10 UH K	
CH-106	612479000	BNA-15 UH K	
CH-202	612635000	BNS-1UH K SUB.	
CH-351	612555000	BCH 15MH15%E/W	
CH-401-402	930071361	BCH 47 UH K 800MA	
CH-403	612665000	BNA-2,2 UH K	
CH-404	612633000	ASS.BOB.40UH K	
CH-405	930070860	BCH 500 UH M P=15	
CH-406-407	930070808	BCH 80 UH 7% P=10	
CH-408-409	930072465	BNU 23.5D050F4,1 TA593/A	
CH-501	612634000	BNS-10UHK SUB.	
CI.-1	931590046	I.C. NVM3060-12	
CI.-1	592732000	I.C. CF72306	
CI.-101	592340000	I.C. 4066B MOS	
CI.-102	592434000	I.C. TDA3301/B	
CI.-2	592827000	I.C. SAA1293 (ST92-10)	
CI.-2	592832000	I.C. CF72307	
CI.-201	592642000	I.C. TDA3857	
CI.-202	592618000	I.C. MC44130 MOS	
CI.-203	592643000	I.C. TDA2009	
CI.-204	592644000	I.C. TDA2822M	
CI.-3	592738000	I.C. TMS44C256/	
CI.-351	592614000	I.C. TDA8145	
CI.-401	592488000	I.C. TDA4601	
CI.-402	592646000	I.C. TDA8139	
CI.-501	592623000	I.C. TDA4504B	
CI.-601	592620000	I.C. TDA8170	
CI.-701	592647000	I.C. TEA5101A	
CI.-951	592462000	I.C. TEA5114A	
CI.-952	592460000	I.C. MC14053BPMOS	

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHUNG	DESCRIPTION
CI.-953	930070598	I.C. MC1458CP1	
D-1-2-104-105-106-351-412-413 D-501-701-702-703-704 D-201-202-203-204 D-1	930074457	DSC-1N4148	
D-101-406-406/A-601 D-205	930074793	DSR-1N4001 IFSM 50A	
D-301-302-305-306-407 D-405	930074085	DSC-BA157 VR400 IF1/9A	
D-303 D-408	582186000	DRV BYW95C VR600 IF3/70A	
D-304	930070797	DRV BY228 VR1500IF5/10A	
D-401-402-403-404 D-705	930074478	DSR-1N4006 IFSM 50A	
D-409-410	582220000	DRV-BYV28/100 I=3,5A	
D-411	582219000	DRV-BYV27/100 I=2A	
D-952-953	582183000	DCM.LL4148 BULK	
DL-1	582221000	LED	
DZ-1	582182000	DZS-ZTE2	
DZ-301	930074324	DZE-ZPD12	
DZ-351-501	930073832	DZE-ZPD22	
DZ-352	582241000	DZE-1N5363B	
DZ-401	930070796	CI -ZTK33A 30-32V	
F-401	930076759	SICHERUNG 3,15A T	FUSE
F-401	930076491	SICHERUNG-HALTER	FUSE HOLDER
F-402	652025000	SICHERUNG 2,5A T 250V	FUSE
FC-101	792274000	4.43 MHz	
FC-201	792217000	OFWG3255	
FC-202	930072117	5,74 MHz	
FC-203	930702202	5,5 MHz	
FC-204	792255000	CSB437F3	
I-401	672098000	NETZSCHALTER	MAINS SWITCH
L-102	612670000	BSE 7X7 4,43MHZ	
L-201	612581000	BSC 5,62M 7X7DM7066-1	
L-202	612696000	BSE 5,62M 7X7DSG-3005	
L-203	930071188	BSC 38,9M 7X7TY10932	
L-204	612618000	BSC 54,7K 7X7DM9006SC	
L-301	612656000	704237/90	
L-302	612616000	BPO 1,1 MH 7%	

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHUNG	DESCRIPTION
L-501	930072686	BSC 5,5MHZ	
L-502	612668000	BSE 7X7 38,9MHZ	
LR-101	792256000	0,33US	
LR-102	792185000	64US	
P-101	930072519	POA 1K0 M 0,1W	
P-401	552167000	POA 4K7 M 0,1W	
P-501	930072531	POA 10K M 0,1W	
P-502	552171000	POA 22K M 0,1W	
P-601	552223000	6 TRIMMER	
P-602	552214000	PTV 100KM 0,1W	
P-701-702	930072547	POA 2K2 M 0,1W	
PO-401	543138000	PTC 260VRMS I.MIN6A	
PR-172	682552000	KOPFHOERERBUCHSE	HEADPHONE JACK
PR-201-202	682595000	JACK BUCHSE	JACK OUTPUT
PR-951-952	682641000	SCART BUCHSE	SCART SOCKET
PTC-401	543613000	PTC 5K (25ÕC) 265V	
Q-1	930702008	4,000MHZH QUARZ	QUARTZ
Q-1	792188000	13,875MHZ QUARZ.	QUARTZ
Q-101	792195000	4433,619KHZH QUARZ	QUARTZ
R-13 R-226	543061000	RFU-10R J 0,3W	
R-2	542366000	RFU-6R8 J 0,3W	
R-301	543641000	RFU-6R8 J 0,5W	
R-302	930071244	RPM 180RJ 2W	
R-303	542938000	RPM R82 K 2W	
R-305	543088000	RPV 6K8 K 5W	
R-306	930070839	RFP 1K5 J 1W	
R-307	542573000	RPV 4R7 K 11W	
R-308	543957000	RFU-R22 K 0,5W	
R-309	543131000	RFU-8R2 J 0,5W	
R-351-360	542894000	RFU-27R J 0,3W	
R-401	543139000	RPM 2K7 J 2W	
R-402	930071086	RAI 10M J 1W	
R-403	543915000	RFA 4R7 K 4W	
R-405	543989000	RSM-R68 J 0,7W	
R-409	930071224	RPM 100RJ 2W	
R-412	543089000	RPM 270KJ 2W	
R-413	543137000	RPM 390RJ 2W	
R-414-728	930070121	RFU-R10 K 0,4W	
R-419	930070224	RPM 56K J 2W	
R-420	543627000	RFU R10 K 1W	
R-601	930071270	RPM 1R0 K 2W	
R-608 R-614	543919000	RSM-R56 J 0,7W	

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHUNG	DESCRIPTION
R-610	930070013	RFU-2R2 J 0,4W	
R-611	543883000	RPM 330RJ 2W	
R-613	544016000	RSC 180RJ 1W	
R-614/A	930070109	RFU-4R7 J 0,5W	
R-702-707-712	930070310	RSM-68K G 0,7W	
R-727	930071246	RPM 2R7 J 2W	
R-729	542432000	RSC 1K5 J 1W	
R-730	930070229	RFU-47R J 0,3W	
R-81-508	930070342	RFU-4R7 J 0,3W	
T-1-101-171-402-502-503-505-601-701 T-205-206 T-1-3-4-6 T-951	930071228	TRN'BC548B NPN EM	
T-102-501-504-602 T-202-204	930071230	TRN'BC558B PNP EM	
T-103 T-203 T-2 T-952-955	930071228	TRN'BC548B NPN CO	
T-2 T-953-954	930071230	TRN'BC558B PNP CO	
T-201	930074346	TRN'BC337/25 NPN CO	
T-301	572234000	TR BD675 NPN	
T-302-401	572280000	TR S2000AF	
T-5	572225000	TRN'BC369EM	
T-702	930070840	TRN'BF393 NPN EM	
TR-301	930702026	TREIBER-TRAFO	DRIVER TRANSFORMER
TR-302	632077000	ZEILEN TRANSFORMER	EHT TRANSFORMER
TR-401	612648000	BFR 2X28MH D.	
TR-402	622120000	SCHALTNETZTEIL	SWITCH-MODE TRANSF

EACH NR. REF.	CODE NO.	BEZEICHNUNG	DESCRIPTION

804611501 PC041 2 SCARTPLATINE / 2 SCART MODULE

C-951	930073747	CEN'100U M 25V	
C-952-953-954-955-956-957-961	532276000	CFN'100N K 63V	
C-958-962-963	930073468	CEN'10U M 63V	
C-958/A	930074022	CCN'47N Z 50V 2F4	
C-959-960-967-968	930074048	CFN'220N K 63V	
C-964-970	512174000	CEN'10U M 35V	
C-965	930070828	CEN'1U0 M 100V	
C-966	930073161	CEN'1U0 M 100V	
C-971-972-973-974-975-976-977-978	522808000	CMI.4N7 M 16/X	
CI.-951	592462000	I.C. TEA5114A	
CI.-952	592460000	I.C. MC14053BP MOS	
CI.-953	930070598	I.C. MC1458CP1	
D-952-953	582183000	DCM.LL4148 BULK	
PR-951-952	682641000	SCART BUCHSE	SCART SOCKET
R-977-978	543236000	RMM.1K0 J 1/8W	
T-951	930071228	TRN'BC548B NPN EM	
T-952-955	930071228	TRN'BC548B NPN CO	
T-953-954	930071230	TRN'BC558B PNP CO	

804935002 PC118 TOP VIDEOTEXT / TOP TELETEXT

C-1-3-14-15-16-17-18-23-24-25	532276000	CFN'100N K 63V	
C-10	930072294	CFN'10N K 63V	
C-13	930073601	CEN'22U M 35V	
C-19	930070828	CEN'1U0 M 100V	
C-2	930073251	CCN'1N0 K 50V 2B4	
C-20	930070824	CEN'220U M 16V	
C-21	930071451	CEN'100U M 25V	
C-22	930074052	CFN'470N K 63V	
C-4-12-21	930073747	CEN'100U M 25V	
C-5-6	930073821	CCN'18P J 50V NPO	
CI.-1	592732000	I.C. CF72306	
CI.-2	592832000	I.C. CF72307 PLCC	
CI.-3	592738000	I.C. TMS44C256/8/10	

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHUNG	DESCRIPTION
D-1	930074457	DSC-1N4148	
Q-1	792188000	13,875MHZ QUARZ	QUARTZ
R-2	542366000	RFU-6R8 J 0,3W	
T-1-3-4-6	930071228	TRN'BC548B NPN EM	
T-2	930071228	TRN'BC548B NPN CO	
T-5	572225000	TRN'BC369 EM	

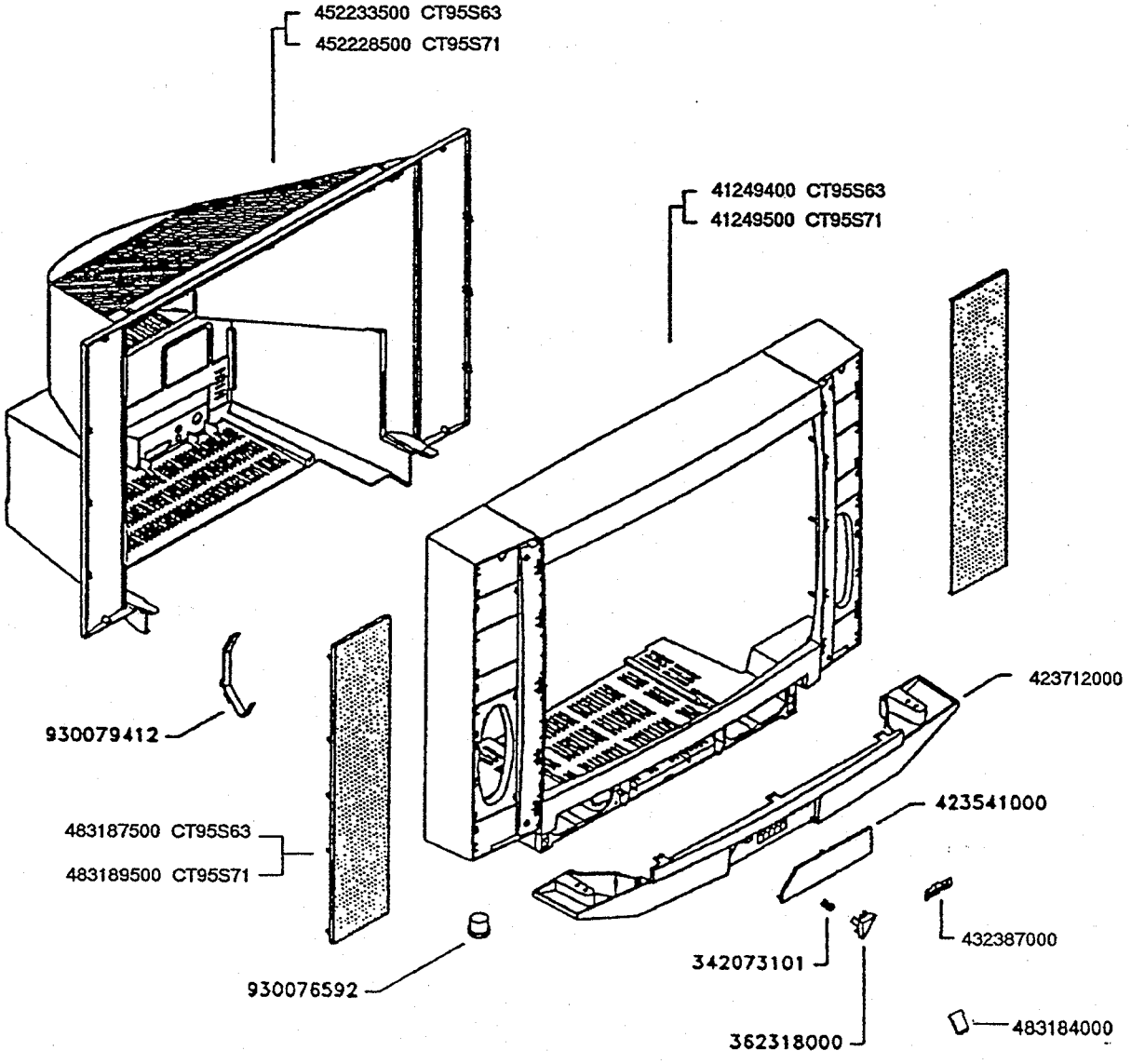
804649000 PC048 NICAM DEKODER / NICAM DECODER

C-13-34	512174000	CEN'10U M 35V	
C-2	512244000	CEN'470U M 16V	
C-21	930073251	CCN'1N0 K 50V 2B4	
C-27-28-30-31	930074052	CFN'470N K 63V	
C-29	930073747	CEN'100U M 25V	
C-32-35	930071451	CEN'100U M 25V	
C-41-42	930073253	CCN'470P K 50V 2B4	
C-7-12	930073601	CEN'22U M 35V	
C-8-37-38-39-40	930073468	CEN'10U M 63V	
CH-2	612659000	BNR'10 UH K	
CI.-1	592739000	I.C. CF70088	
CI.-2	592659000	I.C. TDA1543	
CI.-3-4	930072195	I.C. LM833N-626	
CI.-5	592741000	I.C. MC14052BP	
Q-1	792329000	16,384 MHZ QUARZ	QUARTZ
T-1-2-3-4-5	572264000	TNC=BC847B NPN	

804575331 BS848 STEREO DEKODER / STEREO DECODER

C-201-251	512115000	CEN'22U M 16V	
C-202-211/A	930073160	CCN'10N Z 50V 2F4	
C-203	930073163	CEN'2U2 M 63V	
C-204	930073972	CEN'2U2 M 63V	
C-207	930070696	CCN'68P J 50V N150	
C-208-229-230	512174000	CEN'10U M 35V	
C-213-215	532422000	CFN'2N2 J 63V	
C-214-216	532386000	CFN'1N0 J 63V	
C-217	930073253	CCN'470P K 50V 2B4	
C-218	532419000	CPN'3N9 J 63V	
C-220	930072299	CFN'22N K 63V	
C-221-222	930073663	CEN'4U7 M 63V	
C-223-223/A	930070824	CEN'220U M 16V	

SACH NR. REF.	KODE NR. CODE NO.	BEZEICHUNG	DESCRIPTION
C-224-225-234-235-240-242-244-247-249	532276000	CFN'100N K 63V	
C-226-258-259	930073251	CCN'1N0 K 50V 2B4	
C-227-228	930074050	CFN'330N K 63V	
C-232	930073468	CEN'10U M 63V	
C-236	512244000	CEN'470U M 16V	
C-237-238	930071451	CEN'100U M 25V	
C-239-241	512175000	CEN'220U M 16V	
C-243-246	930073747	CEN'100U M 25V	
C-245-248	930072983	CRB 1000U M 25V	
C-250	512169000	CRB 2200U M 35V SUB.	
C231-233	930074048	CFN'220N K 63V	
CH-201	930071276	BNA-10 UH K	
CH-202	612635000	BNS-1UH K SUB.	
CI.-201	592642000	I.C. TDA3857	
CI.-202	592618000	I.C. MC44130 MOS	
CI.-203	592643000	I.C. TDA2009	
CI.-204	592644000	I.C. TDA2822M	
D-201-202-203-204	930074457	DSC-1N4148	
D-205	930074793	DSR-1N4001 IFSM 50A	
FC-201	792217000	FWG3255	
FC-202	930072117	5,74 MHz.	
FC-203	930702202	5,5 MHz	
FC-204	792255000	CSB437F3	
L-201	612581000	BSC 5,62M 7X7 DM7066-1	
L-202	612696000	BSE 5,62M 7X7 DSG-3005	
L-203	930071188	BSC 38,9M 7X7 TY10932	
L-204	612618000	BSC 54,7K 7X7 DM9006SC	
PC1-4	682652000	CON 4V P2.5M V CR	
PR-201-202	682595000	JACK BUCHSE	JACK OUTPUT
R-226	543061000	RFU-10R J 0,3W	
T-201	930074346	TRN'BC337/25 NPN CO	
T-202-204	930071230	TRN'BC558B PNP EM	
T-203	930071228	TRN'BC548B NPN CO	
T-205-206	930071228	TRN'BC548B NPN EM	


452233500 CT95S63
452228500 CT95S71
41249400 CT95S63
41249500 CT95S71
930079412
483187500 CT95S63
483189500 CT95S71
423712000
423541000
930076592
342073101
432387000
362318000
483184000

ADJUSTMENT PROCEDURE
PC 040 CHASSIS (TAST 2)

PRELIMINARY

Power supply

- Brightness and contrast to minimum (dark screen), with syncronized picture.
- Adjust P401 to 144 ± 1 V (for 25" 28" VDC). 155 V ± 1 V (for 25" 28" PH-33" VDC).

Geometry

- Signal applied to the aerial. Brightness, contrast and colour saturation controls in middle position
- Short circuit, with bridge, Fo Adjustment.
- Adjust P501 to obtain minimum horizontal running picture.
- Disconnect the bridge shortcircuiting Fo Adjustment.
- Adjust P601 (A section), to obtain correct vertical size.
- Adjust P602 (B section), for correct vertical linearity.
- Adjust P602 "vertical shift" for picture correct vertical centering.
- Adjust P601 (C section) to center the picture horizontally.
- Adjust P601 (F section), to obtain correct horizontal size.
- Adjust P601 (D section) for straight vertical lines on picture borders (E/W pin cushion correction).
- Adjust P601 (E section) to optimize the simmetry of vertical lines on picture borders (trapezium correction).

Video and audio intermediate frequencies (IF) adjustment

Instrument used:

- video and audio intermediate frequencies modulator, B/G standard for video modulation; grey scale and 2T signal with 100% white modulation (white bar). Modulation depth: 100% (residual carrier 10%).
  Carriers modulation: audio 400 Hz (SC1) and
  SC = Sound Carrier 1 KHz (SC2).
  with + or - 30 KHz frequency deviation.
  Video and sound carriers proportion 13 and 20 dB respectively; signal level 50 mV + or - 1 dB.

Video intermediate frequency adjustment

- Apply the above specified signal in parallel to Ch202 with a balanced probe.
- Connect oscilloscope to T501 emitter.
- Adjust L502 for 2T signal simmetry, on the lower part, with an amplitude overcompensation (+7% or -5%) in respect to white bar level.
- Adjust L501 for minimum 5.5 MHz signal on the video signal (eventually connect a very low value capacitor between input and output pins of the SAW filter).

Audio circuit adjustment (stereo)

With signal used for IF video adjustment, connect oscilloscope probe on CI201 pin 15. Adjust L203 for minimum video signal.

- Adjust L202 (5.5 MHz) for maximum output (with minimum distortion) with oscilloscope probe connected to CI201 pin 7.
- Adjust L201 (5.74 MHz) for maximum output (with minimum distorsion) with oscilloscope probe connected to CI201 pin 6.
- Adjust L204, with oscilloscope probe (10/1 attenuation) connected in parallel to 204 itself, for maximum 54.7 KHz signal output (at least 60 mV p.p. output).

Stereo separation adjustment

Apply the same signal used for IF video adjustment.
Get the CTV set into "Service" mode in the following way: CTV set in stand-by condition.

- Push simultaneously push-button OSD <->, Program - and Volume - on the CTV push-button unit and switch on the set with the remote control.
- Press the "Audio Function Selection" push-button to select audio functions (see Manual Instruction of the set): function Balance, Lev K1 and Lev K2 appear on the screen.
- The Balance function is selected as it looks magenta foreground and blue background.
- If the Balance level is not in the middle, press buttons +/- to adjust it right in the middle.
- Connect the oscilloscope probes to pins 1 and 3 of the SCART socket.
- Select Lev K2 function by pressing the button to select audio functions: Lev K2 is selected when it appears with magenta foreground on blue background.
- Adjust Lev K2 function by pressing buttons +/- to get the best stereo separation (minimum L signal on pin 3 of the SCART socket).

NOTE: Turn the CTV set off to get out of "Service" mode.

Output levels adjustment

With a two channels oscilloscope connected on CI202 pins 17 and 18, adjust Liv. 1
and Liv. 2 of the same quantity (even numbers) to obtain 550 mV + or - 1 dB level.

Audio circuit adjustment (mono)

- Audio module (mono) inserted.
- Connect oscilloscope probe to Scart socket pin 1 or 3.
- Adjust L261 for maximum demodulated signal output (with minimum distortion).

AGC (Automatic Gain Control) adjustment

- Connect a signal to aerial input (1.5 mV on UHF band).
- Connect a voltmeter across C83.
- Adjust P502 to obtain 7.5 V.

Luminance - Crominance circuits adiustment

(Colour test pattern with standard modulation)

- Connect oscilloscope probe (10/1 attenuation) on CI701 pin 1.
- Use the remote control to set the colour amplitude to the value shown on the schematic diagram (matrix condition).
- Adjust P101 for the lowest signal amplitude in the area of the anti-PAL information.
- Adjust L105 to obtain the minimum difference in colour signal amplitude between two consecutive lines.

G2 adjustment

(Use standard test pattern)

- Use the remote control unit to blank the last bar on the grey scale and set colour to minimum (B/W picture).
- Use an oscilloscope (d.c. input) to mesure the black bar level on CI701 pins 7 -10 - 13. Connect the probe of the oscilloscope to the pin which shows the highest d.c. black
- Adjust, with G2 potentiometer, for 150 V.

Focus adjustment

- Use the focus potentiometer to obtain best focus.

White adjustment

(Before beginning adjustment, set potentiometer P701- P702 to obtain the maximum video output level)

- Adjust P701 or P702 if coloration is noted on the gray scale.

OPERAZIONI DI TARATURA - NORME PRELIMINARI
TELAIO PC 040 (TAST 2)

Alimentazione

- Luce e contrasto al minimo, schermo buio, immagine sincronizzata.
- Regolare P401 per 144 V ± 1 V; per 25", 28" VDC 155 V ± 1 V; per 25"-28"-PH - 33" VDC.

Geometria

- Segnale in antenna, luce, contrasto, colore a metà regolazione.
- Inserire un ponticello di corto circuito su FO Adjust.
- Regolare P 501 per il minore scorrimento dell'immagine in senso orizzontale.
- Disinserire il ponticello di corto circuito.
- Regolare P 601 (sezione A) per l'ampiezza verticale corretta (scomparsa della merlatura, con monoscopio PHILIPS).
- Regolare P 601 (sezione B) per la corretta linearità verticale.
- Regolare P 602 "shift verticale" per una corretta centratura della immagine in senso verticale.
- Regolare P 601 (sezione G) per la centratura orizzontale.
- Tarare P 601 (sezione F) per un'ampiezza orizzontale corretta (scomparsa della merlatura con monoscopio PHILIPS).
- Regolare P 601 (sezione D) per ottenere le righe verticali diritte ai bordi dell'immagine (E/V).
- Regolare P 601 (sezione E) per la miglior simmetria delle righe verticali esterne dell'immagine (trapezio).

Frequenza intermedia video e audio.

Strumenti necessari:

- modulatore video e suono stereo a frequenza intermedia, norma B/G con modulazione video: bianco al 100% (barra bianca) scala dei grigi e segnale 2T. Profondità di modulazione 100% (portante residua 10%).
  Modulazione delle portanti, suono 400 Hz (SC1) e 1 KHz (SC2) con deviazione di
  frequenza di ± 30 KHz con rapporto tra portante video e portanti suono di 13 e 20 dB rispettivamente. Livello del segnale 50 mV ±1 dB.

Taratura della media frequenza video.

- Applicare il segnale sopra specificato con sonda bilanciata in parallelo a Ch 202. Collegare la sonda dell'oscilloscopio sull'emettitore di T 501.
- Tarare L 502 per la simmetria del segnale 2T alla base con sovracompensazione in ampiezza del + 7% ± 5% rispetto al livello della barra bianca.
- Tarare L 501 per la minor residua a 5,5 MHz presente sul segnale video (eventualmente con l'aggiunta di una piccola capacità di corto circuito fra ingresso e uscita del filtro ad onde acustiche).

Taratura sezione audio. (Stereo).

Con il segnale come per la taratura IF video, collegare la sonda dell'oscilloscopio su Pin 15 CI201, tarare L203 per il minimo contenuto di segnale video.

- Tarare L202 (515 MHz) per la max uscita (minor distorsione) con sonda dell'oscilloscopio sul pin 7 (CI201).
- Tarare L201 (5,74 MHz) per la max uscita (minor distorsione) con sonda dell'oscilloscopio su pin 6 (CI 201).
- Tarare L204 con sonda dell'oscilloscopio in parallelo a L204 (sonda oscilloscopio 10/1) per la massima uscita (segnale 54,7 KHz) su pin 2 (CI 202) 60 mVpp (minimo).

Taratura della separazione video

Con l'ausilio dello stesso segnale impiegato per la taratura della media frequenza video e con memoria (CI1) precaricata.
Entrare in modo "Service" con la seguente procedura: con il televisore in condizione di "Stand-by" premere contemporaneamente i tasti sul cruscotto: OSD, programma meno e volume meno ed accendere il televisore con il telecomando.
Premere il tasto per la selezione e la regolazione delle funzioni audio (V. libretto istruzioni):
sullo schermo compaiono le funzioni BALANCE, LEV K1 e LEV K2.
La funzione BALANCE è selezionata poiché appare di colore magenta su fondo blu.
Se il valore di bilanciamento non è al centro, regolare con i tasti +/- fino a portarlo.
Collegare le sonde dell'oscilloscopio sui pin 1 e 3 della presa SCART 1 (non influenzati dai toni).
Selezionare la funzione LEV K2 agendo sul tasto per la selezione e la regolazione delle funzioni audio: LEV K2 è selezionato quando compare di colore magenta su fondo blu.
Variare LEV K2 con i tasti +/- del telecomando fino ad ottenere la condizione di migliore separazione stereo (minima modulazione del segnale L, sul pin 3 della presa SCART 1).

NOTA: Spegnere il TVC per uscire dalla condizione di "SERVICE".

Regolazione dei livelli di uscita.

Collegare le due sonde dell'oscilloscopio sui piedini 17 e 18 del CI 202 e regolare
LIV . 1 e LIV. 2 della stessa quantità (numeri pari) per un livello di 550 mV ± 1 dB.
Uscire dal "Service".

Taratura della sezione audio. (Mono)

Televisore equipaggiato di scheda audio-mono.
Collegare la sonda dell'oscilloscopio sul pin 103 della presa SCART.
Tarare L 261 per la massima uscita del segnale demodulato (minor distorsione).

Taratura del controllo automatico di guadagno.

Collegare un segnale in antenna di circa 1,5 mV nella banda UHF. Collegare un voltmetro ai capi di C83
Regolare P602 per 7,5 V.

Luminanza - crominanza.

(Monoscopio colore con modulazione standard).

- Collegare la sonda dell'oscilloscopio (10 : 1) sul pin 1 di CI 701.
- Regolare, con il telecomando, l'ampiezza del segnale colore per la condizione di matrice.
- Regolare P 101 per la minore ampiezza del segnale in corrispondenza dell'informazione anti PAL.
- Regolare L 105 per la minor differenza di ampiezza del segnale colore di due righe consecutive.

Regolazione G2.

(Segnale monoscopio).

- Con il telecomando interdire l'ultima barra della scala dei grigi e mettere al minimo il colore (immagine B/N).
- Misurare con l'oscilloscopio collegato in continua il livello della barra nera sui pin 7 - 10 - 13 del CI 701.
- Collegare la sonda dell'oscilloscopio sui pin 7 -10 -13 con livello del nero in continua più elevato.
- Tarare con il potenziometro della G2 per 150 V.

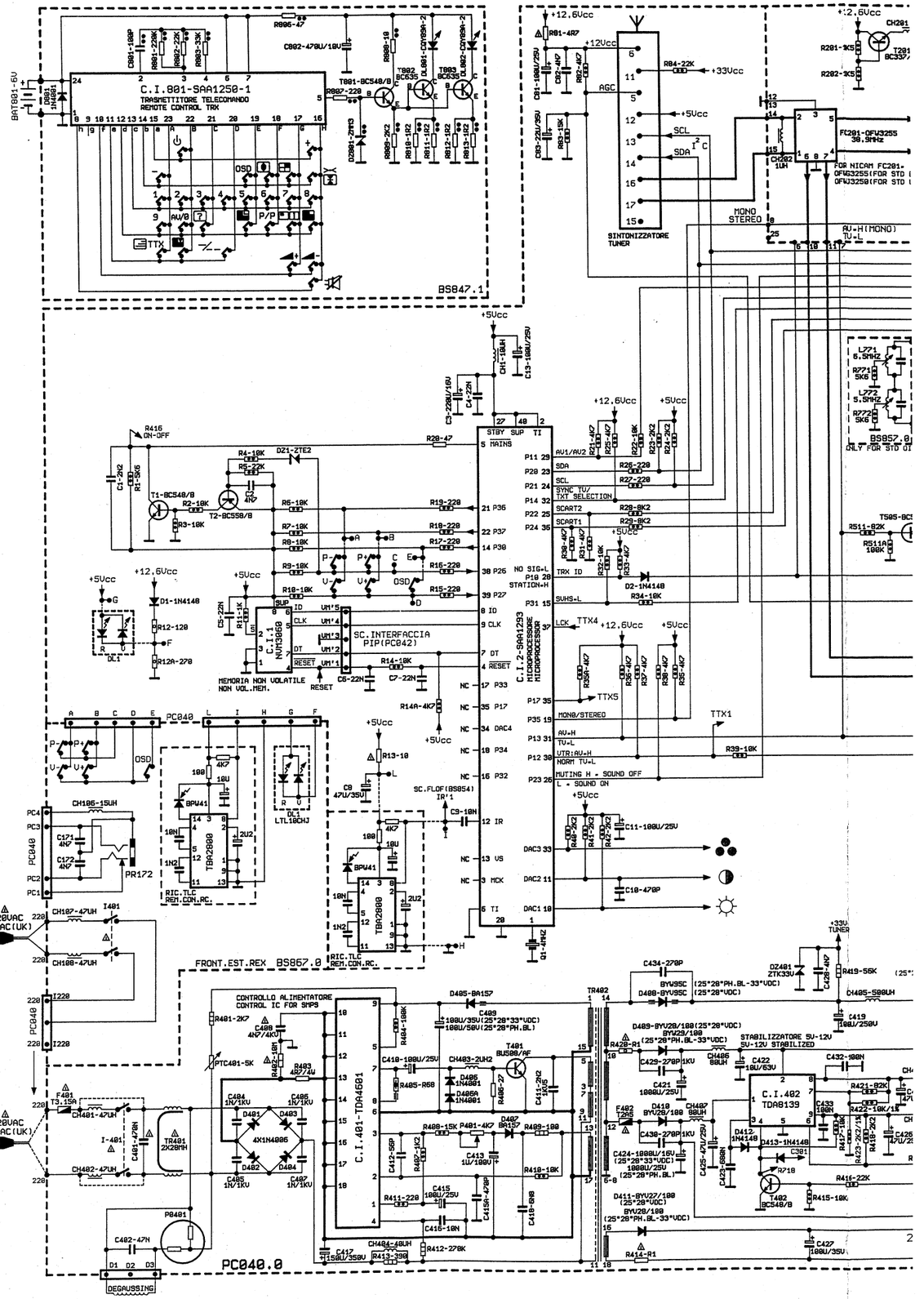
Taratura della focalizzazione.

- Effettuare la migliore focalizzazione mediante l'apposito potenziometro.

Taratura del bianco.

(Iniziare la taratura con potenziometri P701- 702 per la massima uscita del segnale video).

- Tarare P701 - 702 se compaiono colorazioni predominanti sulla scala dei grigi.



BS847.1

BS848.1

BS852.0

BS857.0
ONLY FOR STD DIRT

BS878.0

PC858.0

SC.NICAM(BS860-PC048)

SC.NICAM(BS860)

SC.INTERFACCIA PIP(PC042)

SC.(PC042)

SC.2 SCART
PC041

SC.FILTRI EQUAL
FOR SR

AMPLIFICATORE PER CUFFIA
HEADPHONES AMPL.

SC.COMP.AUDIO FOR 25°20"CHORUS

ONLY FOR BRU

ONLY FOR STD

ONLY FOR NICAM

FOR NICAM JUMPER WIRE 9-24

FOR SECAM JUMPER WIRE 50-51-58-73-74-CH103

L191 ONLY FOR SECAM

SC.FLOF(BS854)

SINTONIZZATORE
TUNER

C.I.101-TDA3857
SUONO PARALLELO+DEMODULATORE AUDIO
GPS+AUDIO DEMODULATOR

C.I.202-MC44130
PROCESSORE STEREO
STEREO PROCESSOR

C.I.203-TDA2869
AMPLIFICATORE AUDIO
AUDIO POWER
AMPLIFIER

C.I.204
TDA2822M

C.I.102-TDA3301/B
ELABORAZIONE SEGNALI DI LUMINANZA E CROMINANZA
LUMA-CROMA-PROCESSOR

C.I.101-HCF4066BEY
COMMUTATORE SVHS
SVHS SWITCH

FILTRO P.B.CROMA
CROMA BP FILTER

C.I.401-TDA4601
ROLLO ALIMENTATORE
ROL IC FOR SMPS

C.I.402
TDA8139

C.I.601
TDA8170
FINALE DI QUADRO
FRAME OP

C.I.2-SAA1293
MICROPROCESSORE
MICROPROCESSOR

C.I.351-TDA8145
MODULATORE EST/OVEST
E/W MODULATOR

C.I.501-TDA4504
MEDIA FREQ.VIDEO-SEP.SINCRO
IF VIDEO-SYNC SEP.

NM93C66
NON VOLATILE
MEM.

TBA2800
RIC.TLC
REM.CON.RC.

TR302-EHT

FOCUS

G2

BEAM LIM

SAND CASTLE

VERTICAL FEEDBACK

VERT. DRIVE

FLYBACK

TRAPP.4.43MHz

SYNC TV/TXT SELECTION

EXT SYNC ENABLE

FOR TXT

FOR ADJUST

VIDEO

SCL

SDA

MUTING

AV-H(MONO)

TU-L

MONO STEREO

INPUT VIDEO

INPUT AUDIO

1/3 PR172

PIN 30 C.I.501
SAND CASTLE

PIN35 CI.2

PIN30 CI.2

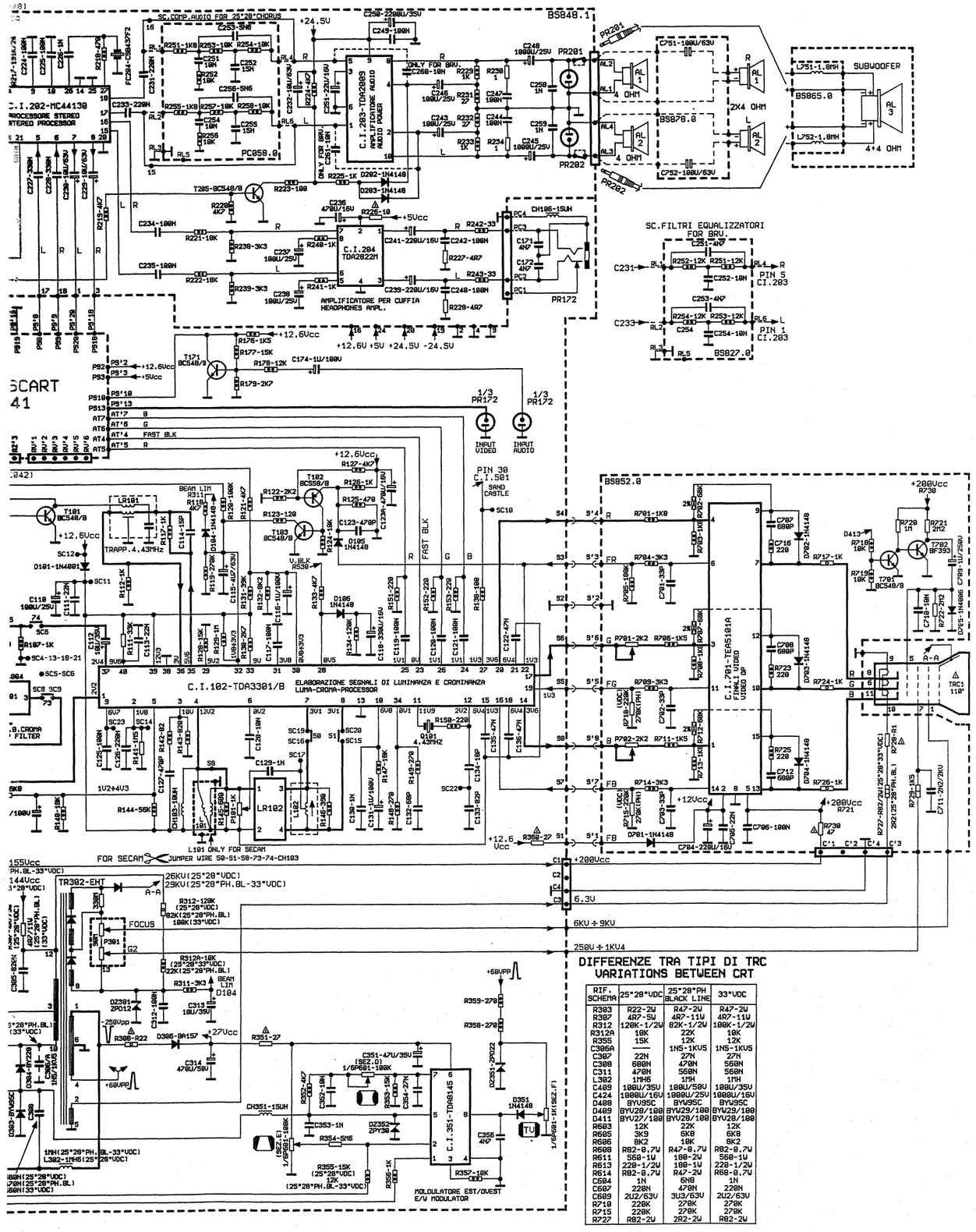
PIN37 CI.2

PIN CI.601

PIN4 TR302

DIFFERENZE TRA TIPI
VARIATIONS BETWEEN

RIF. SCHEMA	25°28°PH	25°28°PH BLACK LINE
R303	R22-2W	R47-2W
R307	4R7-5W	4R7-11W
R312	120K-1/2W	82K-1/2W
R312A	18K	22K
R355	15K	12K
C306A	—	1N5-1KV5
C307	22N	27N
C308	680N	470N
C311	470N	560N
L302	1MH5	1MH
C408	100U/35U	100U/50U
C424	1000U/16V	1000U/25V
D408	BYU95C	BYU95C
D409	BYU28/100	BYU29/100
D411	BYU27/100	BYU28/100
R603	12K	22K
R605	3K9	5K6
R606	8K2	10K
R608	R82-0.7W	R47-0.7W
R611	560-1W	180-2W
R613	220-1/2W	180-1W
R614	R82-0.7W	R47-2W
C604	1N	6N8
C607	220N	470N
C609	2U2/63V	3U3/63V
R710	220K	270K
R715	220K	270K
R727	R82-2W	2R2-2W



RIF. SCHEMA	25"28"UDC	25"28"PH BLACK LINE	33"VDC
R303	R22-2W	R47-2W	R47-2W
R307	4R7-5W	4R7-11W	4R7-11W
R312	120K-1/2W	82K-1/2W	100K-1/2W
R312A	10K	22K	10K
R355	15K	12K	12K
C306A	——	1N5-1KV5	1N5-1KV5
C307	22N	27N	27N
C308	680N	470N	560N
C311	470N	560N	560N
L302	1MH6	1MH	1MH
C409	100U/35V	100U/50V	100U/35V
C424	1000U/16V	1000U/25V	1000U/16V
D408	BYU95C	BYU95C	BYU95C
D409	BYV28/100	BYV29/100	BYV29/100
D411	BYV27/100	BYV29/100	BYV29/100
R603	12K	22K	12K
R605	3K9	6K8	6K8
R606	8K2	10K	8K2
R608	R82-0.7W	R47-0.7W	R82-0.7W
R611	560-1W	180-2W	560-1W
R613	220-1/2W	180-1W	220-1/2W
R614	R82-0.7W	R47-2W	R68-0.7W
C604	1N	6N8	1N
C607	220N	470N	220N
C609	2U2/63V	3U3/63V	2U2/63V
R710	220K	270K	270K
R715	220K	270K	270K
R727	R82-2W	2R2-2W	R82-2W

Colour TV receiver
Farbfernsehgerät
Téléviseur couleur
Televisore a colori

TAST 2

PC 040.0 - 110°

PC 041-PC 042-PC 043

BS 834-BS 847-BS 848-BS 852-BS 858-BS 867

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Moreover, they decline all responsibility for eventual errors, whether due to misprints or incorrect transcription, and reserve the right to make any necessary or useful changes without jeopardizing the essential characteristics.
All resistors without markings are 1/4 W - 5%. All measurements refer to ground with mains supply 220V (240V UK) correct picture and a voltmeter of 20.000 Ohm/V.

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Alle Widerstände ohne Bezeichnung sind 1/4 W - 5%. Alle Messungen beziehen sich auf Masse, mit einer Netzspannung von 220 V (240 V UK) und normalem Fernsehsignal gemessen mit einem Voltmeter von 20.000 Ohm/V.

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Toutes les résistances sans d'indication sont de 1/4 W - 5%. Toutes les mesures sont respect a la masse, avec tension secteur 220 V (240 V UK). Image corecte et avec un voltmètre de 20.000 Ohm/V.

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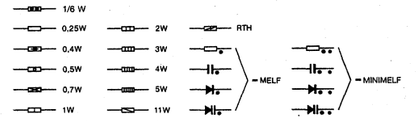
Tutte le resistenze prive d'indicazione s'intendono da 1/4 W - 5%. Tutte le misure s'intendono rispetto a massa con alimentazione rete 220 V (240 V UK). Immagine corretta e con un voltmetro da 20.000 Ohm/V.



In order to ensure the maximum safety and reliability, original spare parts should always be used when replacing components.
Particular care should be taken when replacing components marked with the symbol ⚠ .

Zur Gewährleistung von Sicherheit und Zuverlässigkeit dürfen nur Original-Ersatzteile verwendet werden.
Besondere Sorgfalt wird bei den Teilen, die mit dem Symbol ⚠ gekennzeichnet sind, verlangt.

Pour une plus grande sécurité et fiabilité, tous les composants doivent être remplacés par des pièces originales.
Il faut prêter une attention particulière à ceux portant le symbole ⚠ .

Ai fini della sicurezza ed affidabilità tutti i componenti devono essere sostituiti con pezzi originali.
Particolare attenzione va posta a quelli contrassegnati con il simbolo ⚠ .

MEASUREMENTS PERFORMED USING COLOUR BARS WITH 100% MODULATION

MESSUNGEN SIGNALTYP 100% MODULIERTES FARBBALKEN

LES MESURES SONT EFECTUEES AVEC SIGNAL: MIRE EN COULEUR MODULEE AU 100%

RILIEVI ESEGUITI CON SEGNALE: BARRE COLORE MODULATE AL 100%

MEASUREMENTS PERFORMED WITH
ERGEBNISSE AUS
MESURES EFECTUEES AVEC
RILIEVI ESEGUITI CON

MAX

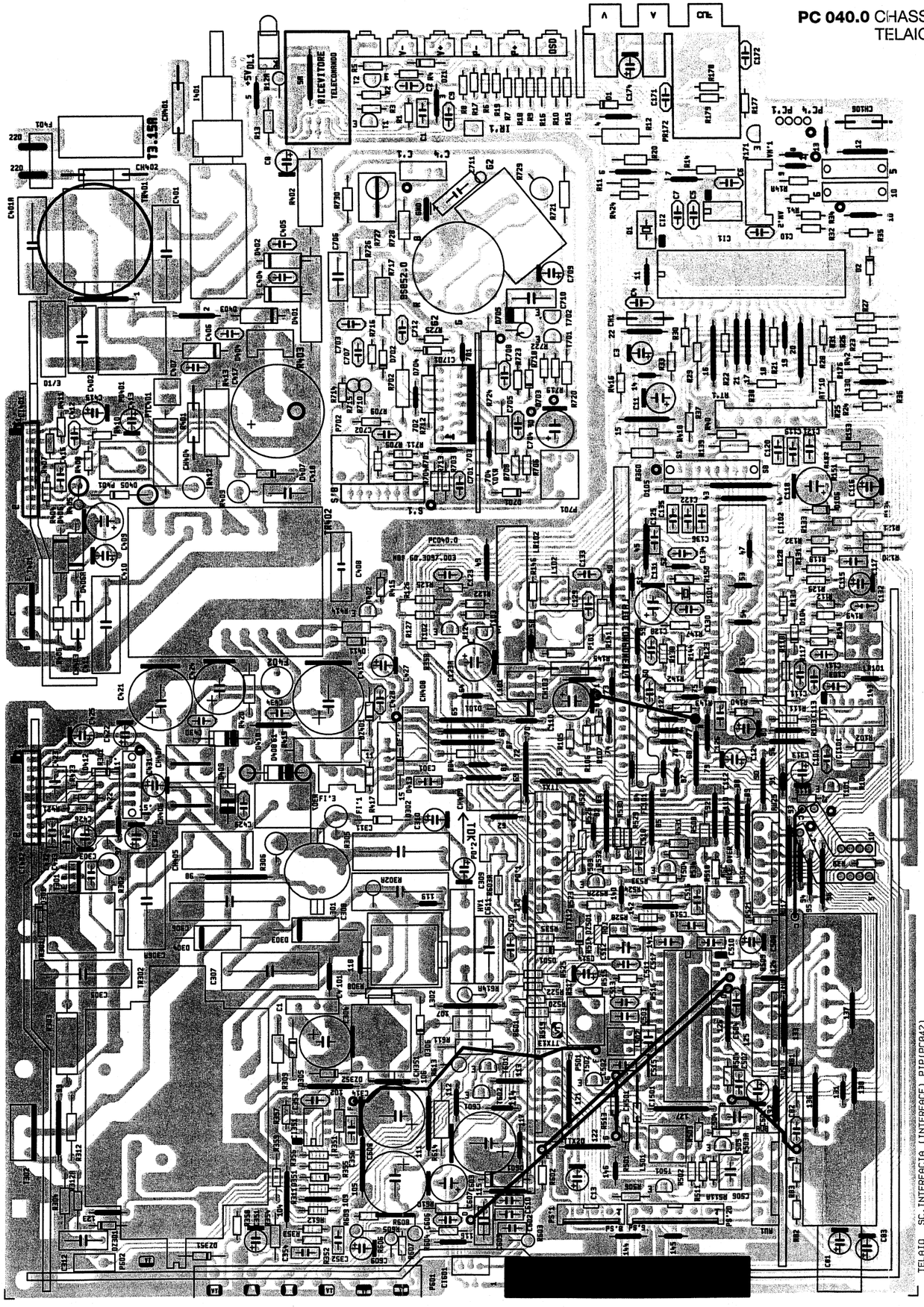
BLACK BAR OFF
SCHWARZER BALKEN AUS
BARRE NOIRE ETEINTE
BARRA NERA SPENTA

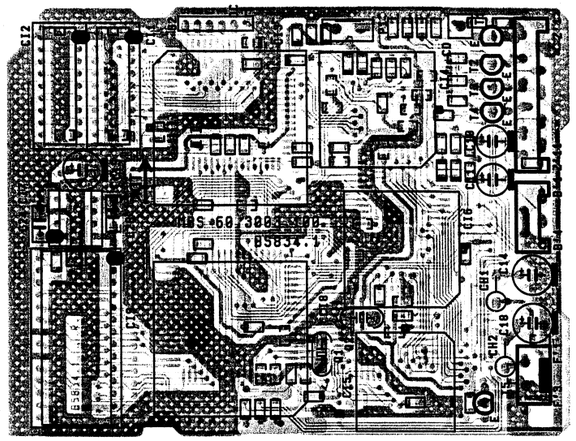
COLOR MATRIX
FARBE MATRIX
MATRICE COULEUR
MATRICE COLORE

VOLUME MAX
LAUTSTARKE MAX
VOLUME MAX
VOLUME MAX

MOD. 100%-1KHZ

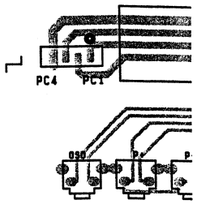
PC 040.0 CHASSIS
TELAIO



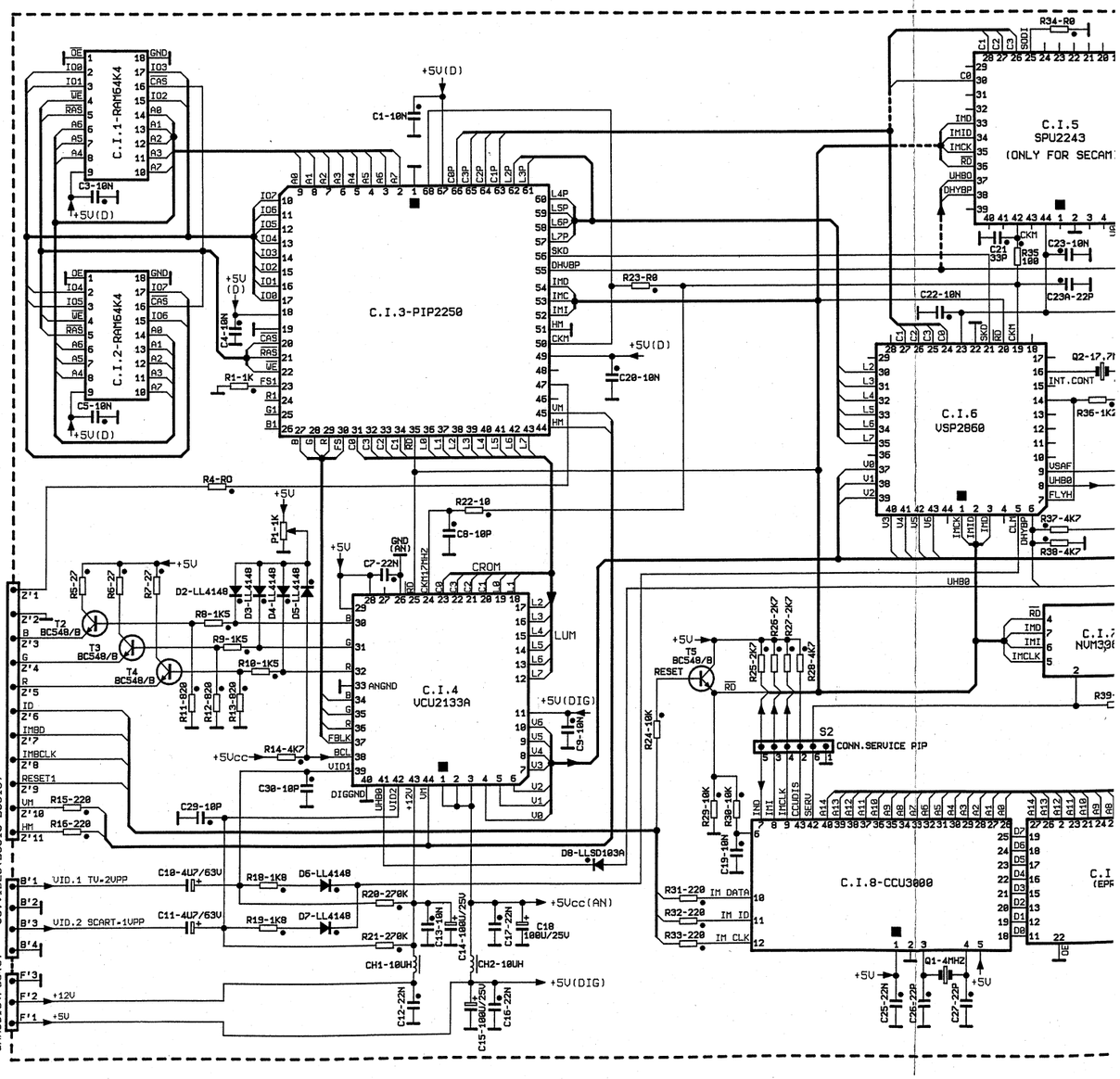


BS 834/SC. PIP

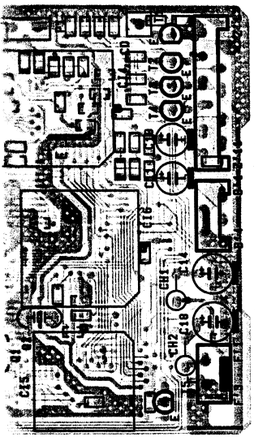
CRUSCC

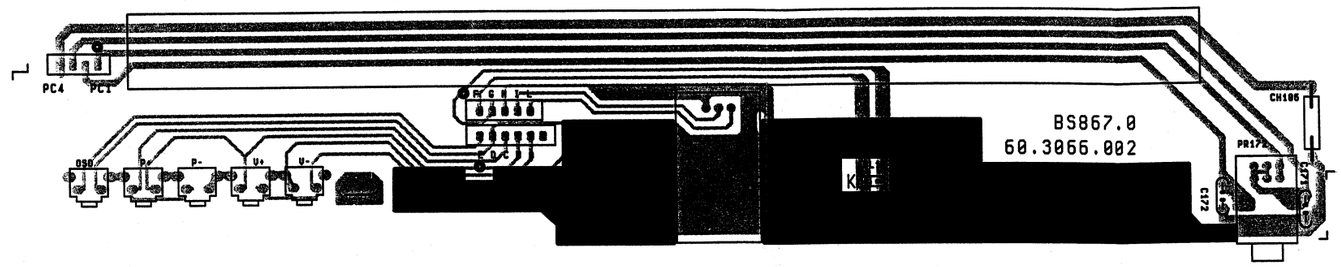


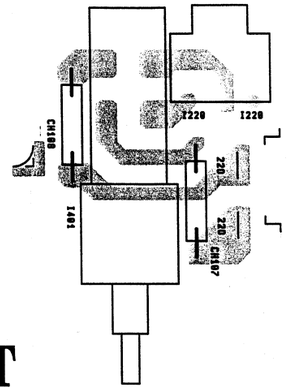
SC. PIP

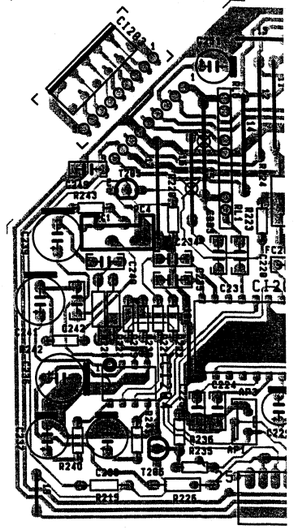


CRUSCOTTO ESTETICA REX

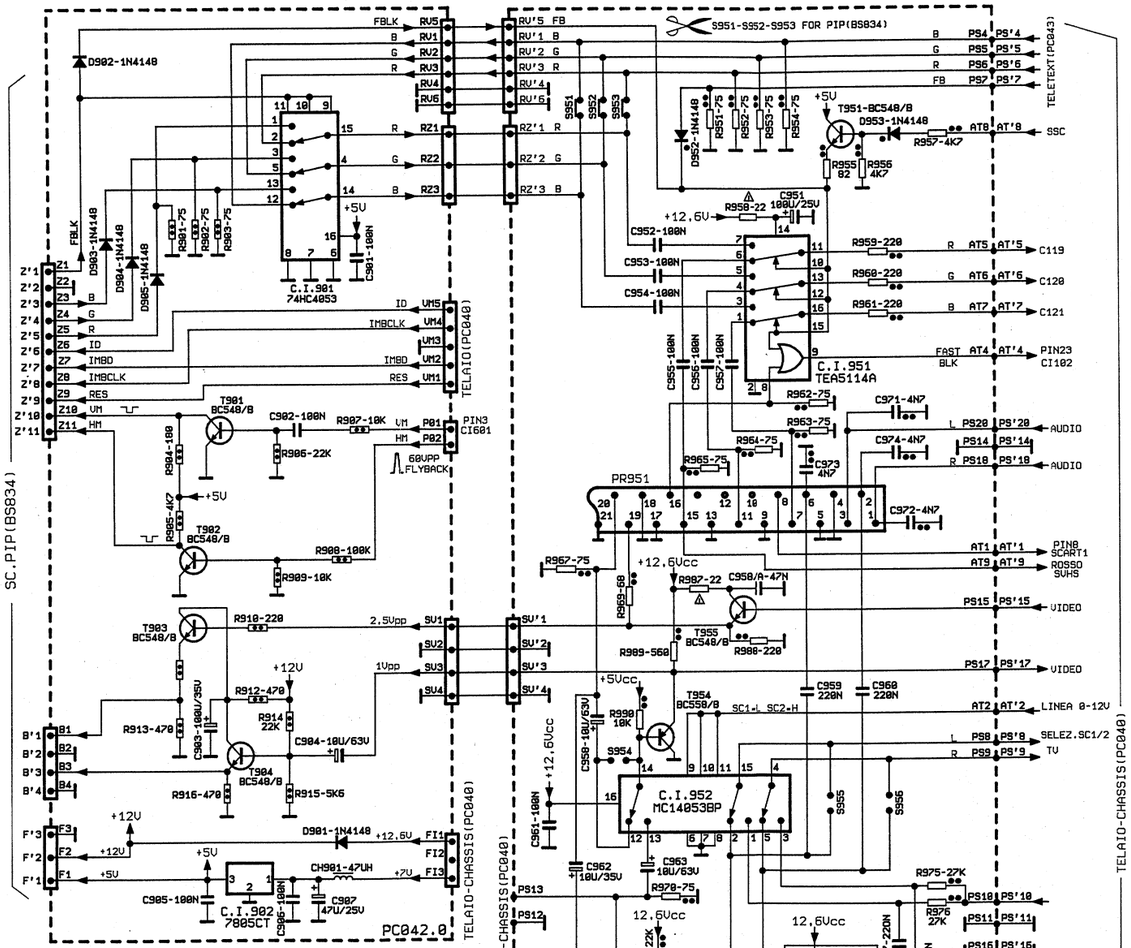


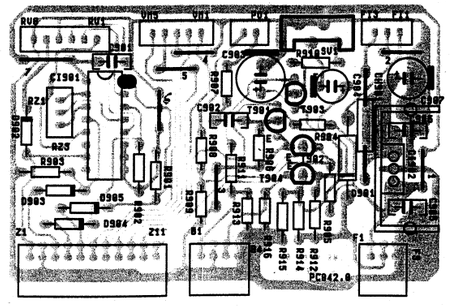






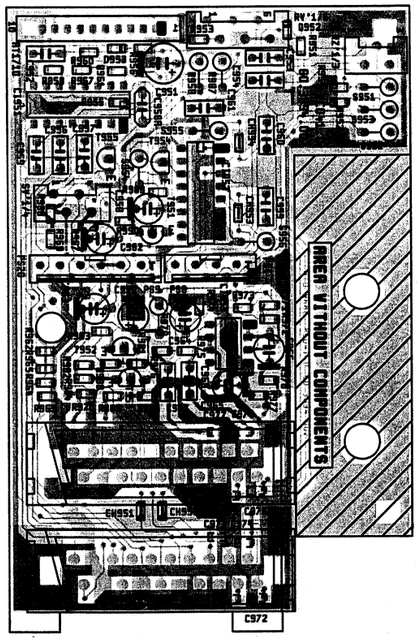
SC. INTERFACCIA PIP

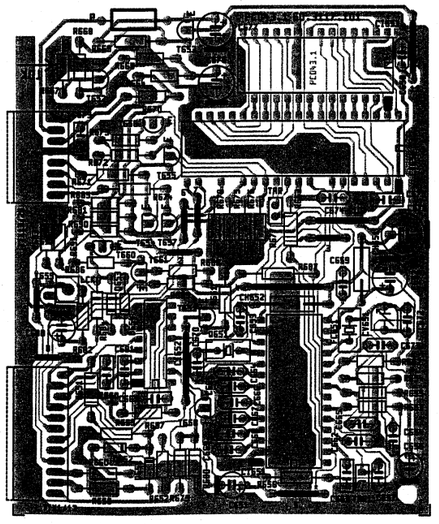




PC 042 - SC INTERFACCIA PIP

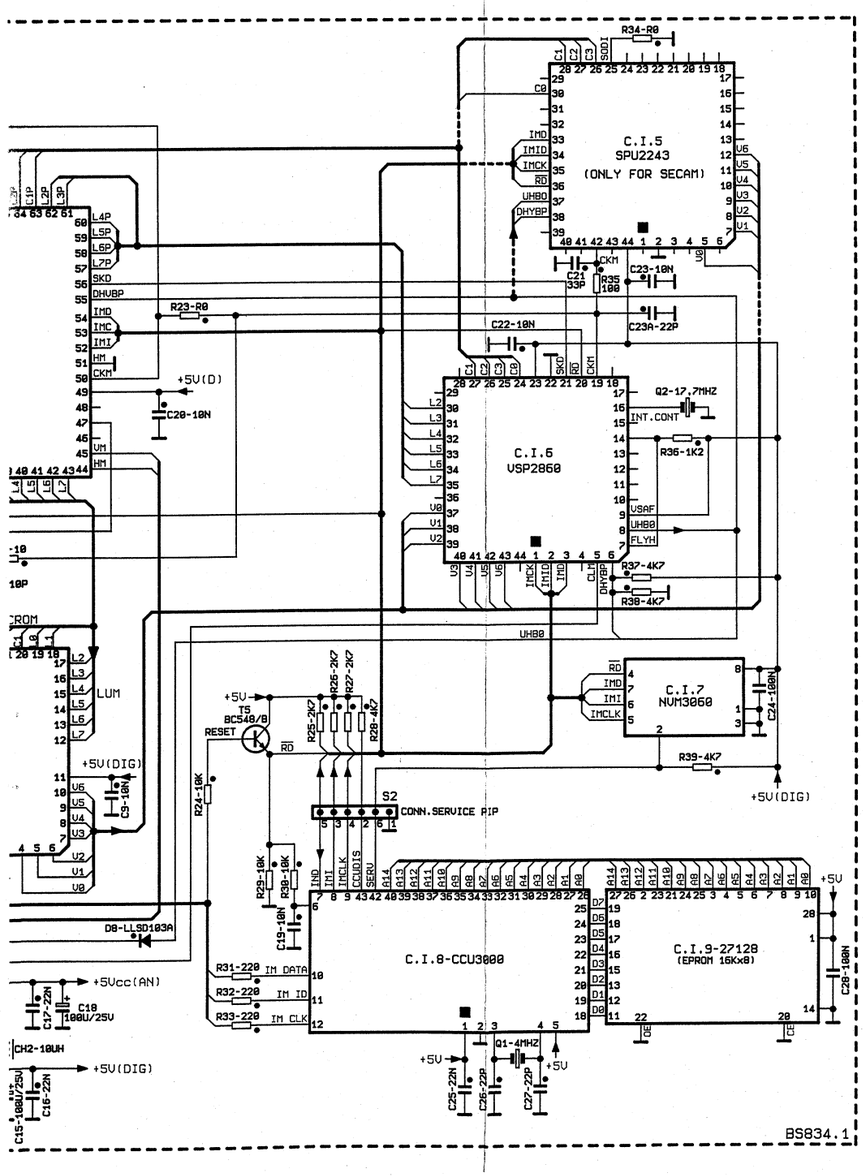
SC. 2 SCART



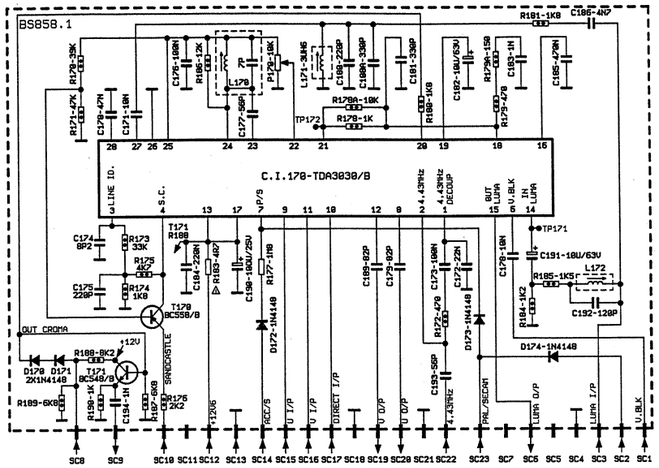


PC 043 TELETEXT CCT

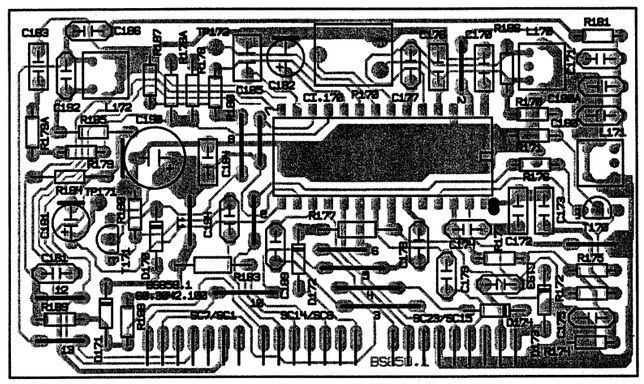
SC. PIP



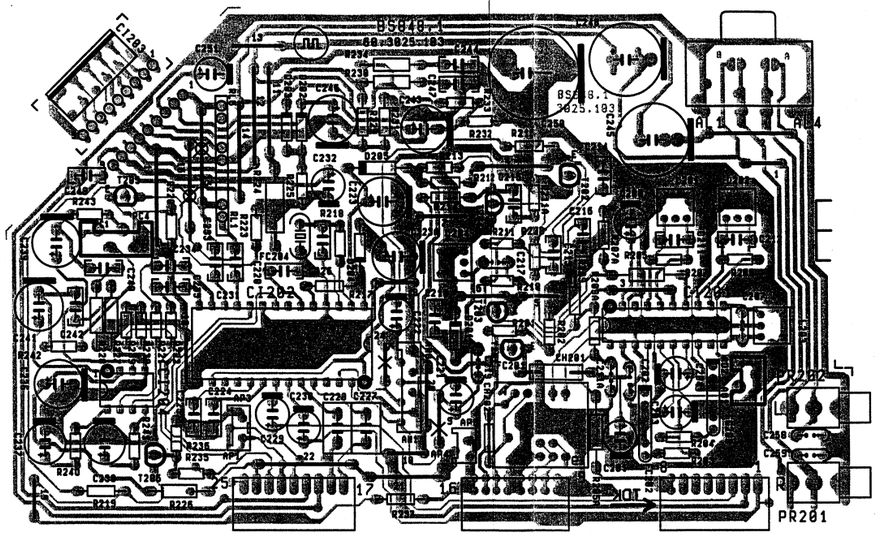
TRANSCODER PAL-SECAM BS 858



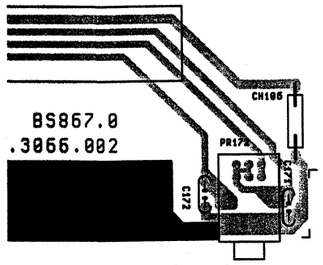
TELAIO-CHASSIS **(PC 040)**

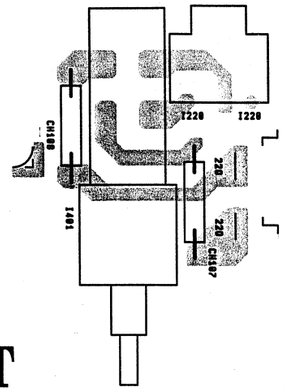


BS 858 - TRANSCODER PAL-SECAM

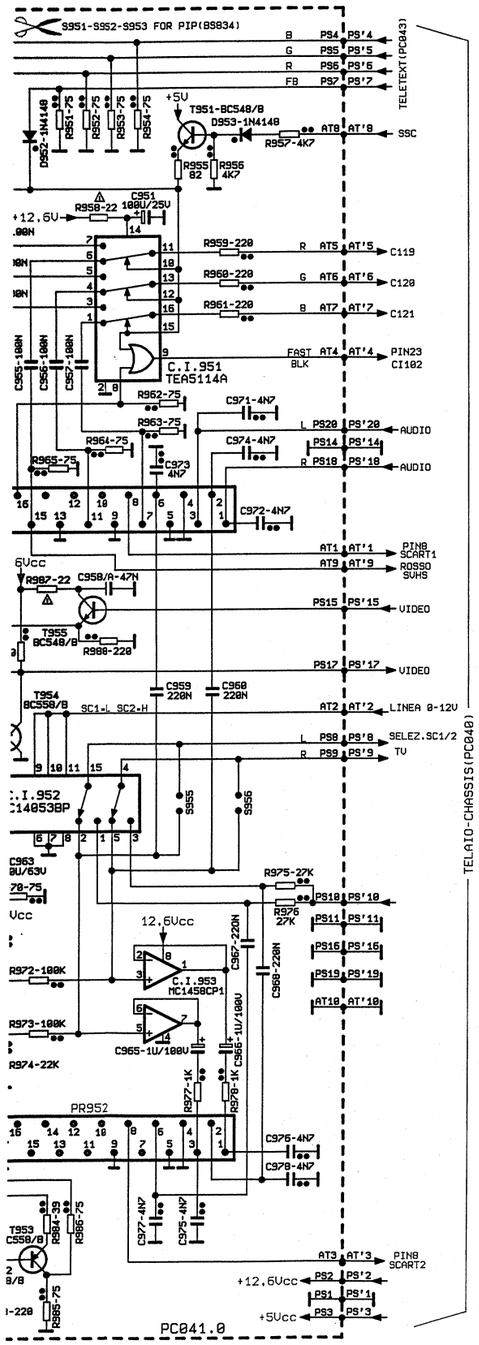


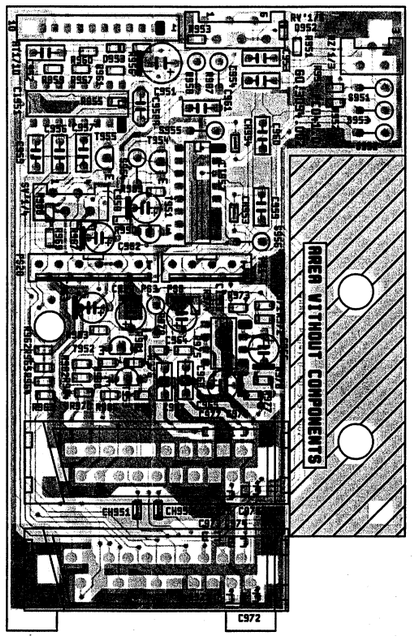
BS 848 - SC. AUDIO STEREO



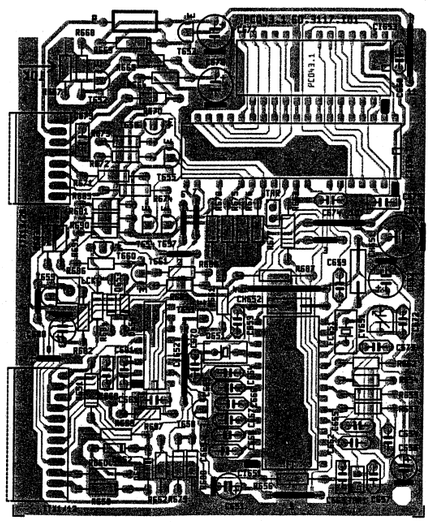


SC. 2 SCART





PC 041/SC. 2 SCART



PC 043 TELETEXT CCT

TELETEXT CCT